

ACCEPTANCE OF GRANTS AND CONTRACTS

1. Post facto reporting

The Governing Council is invited to note the post facto reporting of grants and contracts accepted by the Director over €100 000 per annum, including sums passed to third parties, as detailed below.

Section of Cancer Surveillance (CSU)

1.1 Project title: **Common protocol for data collection and analyses: Evaluating Medical Oncology Outcomes in Asia Study**

This project seeks to better understand factors related to etiology and clinical prognosis by combining cancer registry and medical oncology data. The International Agency for Research on Cancer (IARC), the European Society for Medical Oncology (ESMO), the Danish Cancer Society (DCS) and national partners in selected Asian countries have agreed to collaborate to support the development of clinical population-based cancer registries (cPBCR) in Asia. The 'Evaluate Medical Oncology Outcomes (EMOO)' study will be applied for incident lung cancer cases in Indonesia, Malaysia, Singapore and Thailand, to explore the feasibility of establishing cPBCR in these countries.

Donor:	European Society for Medical Oncology (ESMO)
Duration:	35 months
Funds for IARC:	€557 910 (US\$ 636 884)
Funds for partners:	tbd
Total:	€557 910 (US\$ 636 884)

Partners:

Danish Cancer Society (DCS), Denmark; National partners in Indonesia, Malaysia, Singapore and Thailand.

Section of Early Detection and Prevention (EDP)

Prevention and Implementation Group (PRI)

1.2 Project title: **A scientific evaluation of one or two doses of vaccine against human papillomavirus (ESCUDDO)**

The INCIENSA Foundation and the Costa Rican Agency for Biomedical Research are conducting a large randomized clinical trial to evaluate the efficacy of alternative schedules of Human papillomavirus (HPV) Vaccines in Costa Rica in collaboration with the US National Cancer Institute, which provides the funding for the research. The trial is expected to recruit, vaccinate and follow-up more than 20 000 women using a complex protocol. IARC is one of the collaborating institutions, providing technical assistance in the organization and coordination of the trial.

Donor: National Institutes of Health/National Cancer Institute (NIH/NCI), USA

Duration: 18 months

Funds for IARC: €194 428 (US\$ 240 035)

Funds for partners: tbd

Total: €194 428 (US\$ 240 035)

Partners:

INCIENSA Foundation, Costa Rica; Costa Rican Agency for Biomedical Research, Costa Rica.

Section of Early Detection and Prevention (EDP)

Screening Group (SCR)

1.3 Project title: **HPV Vaccine Clinical Development Support**

This project aims to support the development of a new affordable HPV vaccine. IARC is involved in supporting the Serum Institute of India (SSI) to conduct the phase II and phase III trials. At the request of the SSI and with approval from the competent authority, IARC has provided technical support to design the protocol for the trials. The SSI collaborates with the Rajiv Gandhi Center for Biotechnology (RGCB), Trivandrum, in India to conduct the HPV detection tests (HPV genotyping) for their vaccine trial in a specialized laboratory that was set up by IARC.

IARC's direct involvement in the randomized controlled trials as an independent implementing and monitoring organization will improve the efficiency and scientific rigor of the trials, thus facilitating the acceptance of the results by GAVI and WHO, and contributing to technology development in India, a participating state of IARC. This is indeed a great opportunity for IARC to explore a new paradigm of improving access to preventive health care in low- and middle-income countries.

Donor: Bill and Melinda Gates Foundation (BMGF), USA
Duration: 36 months
Funds for IARC: €824 675 (US\$ 953 381)
Funds for partners: -
Total: €824 675 (US\$ 953 381)
Partners: n/a

Section of Genetics (GEN)

Genetic Epidemiology Group (GEP)

1.4 Project title: **Integrative analysis of lung cancer etiology and risk (IntegraLC_2)**

The US National Lung Cancer Screening Trial (NLST) observed in 2011 that screening with computed tomography (CT) scans could reduce lung cancer mortality by 20%, but with important costs including a high false-detection rate of 95%. The study also indicated important differences in the benefit of screening in different participant groups as defined by their underlying risk of lung cancer, thus highlighting the urgent need for improved risk prediction models when identifying eligible subjects to screen. Our project will therefore focus on evaluating a comprehensive panel of biomarkers of lung cancer risk that have been implicated in previous studies and the extent to which they may inform risk prediction. This will be achieved by bringing together data from ongoing large-scale biomarker studies, and conducting a comprehensive de novo analysis of promising risk biomarkers within the Lung Cancer Cohort Consortium (LC3). The initial stage will involve assaying a panel of promising risk biomarkers at a centralized laboratory for 800 case-control pairs from three prospective cohorts from the US, Europe and Asia, with subsequent large-scale validation of the most informative markers in another 15 prospective cohorts from the LC3 consortium, including 1 500 additional case-control pairs. It is expected that this will result in establishing a distinct panel of validated and informative risk biomarkers for use in lung cancer risk prediction models.

Donor: National Institutes of Health/National Cancer Institute (NIH/NCI), USA
Duration: 68 months
Funds for IARC: €1 137 450 (US\$ 1 316 493)
Funds for partners: €1 556 264 (US\$ 1 801 231)
Total: €2 693 714 (US\$ 3 117 724)

Partners:

National Institutes of Health/National Cancer Institute (NIH/NCI), USA; Baylor College of Medicine (BCM), USA; The Geisel School of Medicine at Dartmouth, USA; Lunenfeld-Tanenbaum Research

Institute, Canada; Harvard T.H. Chan School of Public Health, USA; American Cancer Society (ACS), USA; University of Bergen, Norway; Brigham and Women's Hospital, USA; Cancer Council Victoria, Australia; Fred Hutchinson Cancer Research Center, USA; Feinstein Institute for Medical Research - Northwell Health, USA; Johns Hopkins University, Bloomberg School of Public Health, USA; MD Anderson Cancer Center, USA; Norwegian University of Science and Technology (NTNU), Norway; New York University School of Medicine, USA; University of Bristol, UK; Umea University, Sweden; University of Pittsburgh Cancer Institute, USA; Vanderbilt University Medical Center, USA.

1.5 Project title: **Translational studies of HEAD and neck cancer in South America and Europe (HEADSpAcE)**

Worldwide, more than 550 000 new cases of head and neck cancer (HNC) occur each year, resulting in approximately 300 000 deaths annually. It is the sixth most common cancer in both Europe and South America. A major reason for the high mortality rate for this cancer is the late stage of diagnosis for many patients. Accurate assessment of the prognosis of HNC cases also allows for appropriate treatment decisions. HEADSpAcE will bring together a consortium of 15 partners with a long and successful record of collaboration in HNC. The impact of HEADSpAcE will be to understand reasons for late diagnosis and reduce the proportion of HNC that are diagnosed at a very late stage. It will identify the most appropriate ways to diagnose cancer caused by human papilloma virus, and also provide genomic evidence of strong predictors of prognosis that will have the potential to improve care and reduce treatment related morbidity. Guidelines for implementation into clinical care will also be developed.

Donor: European Commission, Directorate General for Research and Innovation (EC DG RTD), Belgium

Duration: 48 months

Funds for IARC: €720 000 (US\$ 819 113)

Funds for partners: €2 433 448 (US\$ 2 768 428)

Total: €3 153 448 (US\$ 3 587 541)

Partners:

Catalan Institute of Oncology (ICO), Spain; University of Turin, Italy; First Faculty of Medicine - Charles University, Czech Republic; German Cancer Research Center (DKFZ), Germany; University of Glasgow, UK; University of Bristol, UK; Brazilian National Cancer Institute (INCA), Brazil; Antonio Prudente Foundation - AC Camargo / CIPE (APF), Brazil; Hospital Santa Rita (HSR), Brazil; University El Bosque, Colombia; Oncology Cooperative Group Uruguay (GOCUR), Uruguay; University of Buenos Aires, Argentina; University of Tennessee, USA.

Section of Genetics (GEN)

Genetic Cancer Susceptibility Group (GCS)

1.6 Project title: **Genomic characterization of broncho-pulmonary carcinoids (PCA)**

Pulmonary carcinoids belong to the group of lung neuroendocrine tumours that also includes the high-grade large-cell neuroendocrine and small-cell lung cancers. The incidence of pulmonary carcinoids has rapidly increased within the past 30 years, especially at the advanced stages, and although the majority of them can be surgically resected, limited treatment options exist for metastatic disease. In addition, recurrence of disease is observed in approximately a tenth of the surgically resected cases. Comprehensive genomic studies on these tumours are rare due to the limited availability of suitable material. We have established an international network giving us access to a large number of samples. We aim to perform whole-genome sequencing, transcriptome sequencing, and 850k methylation arrays on a series of 100 tumours and matched-normal pairs. Integrative analyses will be done for all the genomic data, which will also be correlated with the correspondent clinical and pathological data. This study will help understand the biological mechanisms underlying the development of pulmonary carcinoids, for which no etiologic cause has been formally identified. It will also help explain the different aggressiveness of the two subtypes, typical and atypical carcinoids, which is needed for clinical decision-making after surgical resection with regards to post-operative treatment. Candidate markers may be identified to predict the likelihood of relapse, which will optimize the follow-up of patients, reducing the costs and the morbidity in this setting. Finally, these data may serve as rationale for clinical trials assessing innovative agents for metastatic tumours.

Donor: Institut National du Cancer (INCa), France

Duration: 36 months

Funds for IARC: €504 715 (US\$ 623 105)

Funds for partners: €182 337 (US\$ 225 107)

Total: €687 052 (US\$ 848 212)

Partners:

Centre Léon Bérard (CLB), France; Institut Curie (IC), France; University of Turin, Italy; University of Graz, Austria; IRCCS, Milan, Italy; IRCCS, Rotondo, Italy; Oslo University Hospital, Norway; St. Vincent's Hospital, Melbourne, Australia; CHRU Nancy, France; Marie Lannelongue, Paris, France; CHU Lyon, France; CHRU Lille, France; CHU Nice, France; CHRU Nantes, France; University Hospital of Maastricht, the Netherlands.

Section of Infections (INF)

Infections and Cancer Epidemiology Group (ICE)

1.7 Project title: **Armenia HPV vaccine multi-cohort single-dose impact study**

HPV vaccines are among the most cost-effective vaccines available. They have been licensed for more than 10 years and demonstrated safeness and effectiveness across different populations and in various geographies across the globe. Important new data have become available to suggest that dosing regimens using only a single dose may have comparable efficacy against vaccine types HPV16/18 to the two-and three-dose regimens. The present project will assess the real-world impact of multi-cohort single-dose HPV vaccination following the introduction of catch-up vaccination in Armenia.

Donor: Bill and Melinda Gates Foundation (BMGF), USA

Duration: 60 months

Funds for IARC: €1 496 391 (US\$ 1 807 236)

Funds for partners: -

Total: €1 496 391 (US\$ 1 807 236)

Partners: n/a

2. Prior approval for projects in collaboration with the private sector

Please note that the following project has been provisionally approved by the Chairperson of the Governing Council.

Section of Environment and Radiation (ENV)

2.1 Project title: **Coordination of the International Birth Cohort Harmonisation Group**

The International Birth Cohort Harmonisation Group has been established to strengthen the collaboration and coordinate the activities of the birth cohorts from Japan, China, France, Denmark and Norway, among others. This is essential to achieve the scientifically most reliable results from those studies. Even large cohorts are hardly big enough to investigate effects on health outcomes in children, as most of them are not common, although very severe, such as sudden infant death or childhood cancer. This is why pooling of data is necessary to increase the statistical power of studies to detect any associations between environmental exposures and health outcomes. An important prerequisite of pooling is the comparability of data, which applies both to how the exposure information is collected and operationalized, and how the outcomes are assessed. This

requires procedures for harmonisation of data. Successful harmonisation requires the moderation of a neutral coordinator ensuring that the most scientifically rigorous approach is taken and that every country has an equal opportunity to participate in this process.

IARC has taken up this role in summer 2015 and the fourth year agreement proposes to continue the scientific secretariat and coordination work as well as the coordination and conduct of joint statistical analyses of lead exposure across studies.

A tripartite collaboration between the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany, the Ministry of the Environment, Japan and IARC has been set up for this. The Japanese Ministry has mandated the Mitsubishi Research Institute Inc. (MRI) to handle on their behalf the contracting with IARC. This service provider was chosen by the Ministry through an open bidding process.

Founded in 1970 as a commemorative project for the 100th anniversary of the Mitsubishi Group, the MRI Group is a corporation based in Tokyo, Japan. Mr Takashi Morisaki is its President. In addition to its think tank and consultation services, the MRI Group also delivers ICT solutions. Its services for the public sector, from central government agencies to local government organizations, include policy formation and implementation support. Its sales for FY2016/9 amounted to 86.9 billion yen. 32.7% of its sales corresponds to think tank and consulting services.

<https://www.mri.co.jp/english/index.html>

Donor:	Ministry of the Environment, Japan (through Mitsubishi Research Institute Group) Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany
Duration:	12 months
Funds for IARC:	€ 60 060 (US\$ 68 328) - (€30 030 from Germany and € 30 030 from Japan)
Funds for partners:	-
Total:	€ 60 060 (US\$ 68 328) - (€30 030 from Germany and € 30 030 from Japan)
Partners:	n/a

3. Prior approval for projects over €500 000 per annum

The Governing Council is invited to consider, for approval, projects submitted over €500 000 per annum, excluding sums passed on to collaborating institutions, and projects that require more than €100 000 per annum, excluding the principal investigator's staff costs, from the IARC regular budget.

There are no projects to be considered for prior approval this year.

4. Interest income from grants

In accordance with the standing authorization provided to the Director under resolution GC/55/R23 and the conditions set forth in the signed agreements, interest income totalling € 1 999 was apportioned to two grants in 2018. Details are provided in the table below.

Grant	Project	Donor	Interest
100401	Monitoring HPV vaccination and HPV screening programs to promote sustained implementation in low and middle income countries	Bill and Melinda Gates Foundation	€ 522
100639	Extended Follow-up of the Participants of IARC-INDIA HPV Vaccination Study to Evaluate the Effectiveness of one, two and three Doses of Quadrivalent HPV Vaccine in Preventing Cervical Neoplasia	Bill and Melinda Gates Foundation	€ 1 477
Total interest income apportioned to grants			€ 1 999